

Final Interagency Report on the Valuation of Oil Produced from Federal Leases in California

May 16, 1996

Prepared for the
Assistant Secretary - Land and Minerals Management
and the
Director of the Minerals Management Service,
United States Department of the Interior

May 16, 1996

TABLE OF CONTENTS

OVERVIEW OF FINDINGS/RECOMMENDATIONS.....	(i)
EXECUTIVE SUMMARY.....	1
HISTORY OF ISSUE/INTERAGENCY TEAM	
Events Leading to Team Formation	13
Interagency Team Formation and Composition	15
Team Mission	16
SUMMARY OF TEAM ACTIVITIES	
Review of MMS Royalty Valuation Regulations	
General	18
Arm's-Length Transactions/Exchanges	22
Confidentiality Agreement	24
Visit to Hoecker McMahon and Buck Law Offices	25
Visit to State Controller's Office	25
Team Recommends Test Audits	27
Innovation & Information	
Consultants, Inc. (IIC) Contract.....	29
Micronomics Contract	31
Detailed Review of Long Beach Contracts--Boston 9/95	32
Audit/Team Presentation of Work, 10/95	34
Presentation of Options, 12/95	36
Timing and Level of California Royalty Collections ..	37

Timing of Royalty Underpayment Collections	38
Options for Underpayment Valuation	
Option I	40
Option II	41
Option III	41
Option IV	42
Option V	42
Option VI	43
Option VII	43

TEAM'S OVERALL FINDINGS

Summary	44
Findings	44
Crude Oil Valuation	44
Sales Distribution and Premia	49
Exchanges	51
Audit Findings	52

RECOMMENDATIONS

General	54
Recommended Approach for Post-3/1/88 Time Periods	
Overview	55
Valuation Recommendations	57
Collection Procedures	60
Post-1988 Period Rationale.....	65
Recommended Approach for the Pre-3/1/88 Period	
Overview	66

Establishing Royalty Underpayments Employing ANS Crude Oil--Recommendation by the Energy and Commerce Department Representatives	67
Authority Under MMS Regulations	68
Recommended Valuation Methodology	74
Procedure for Collections	77
Recommendation by MMS/Department of Interior Solicitor's Office (SOL) Representatives	79
Recommended Time Periods for Pursuing Royalty Collections	
Summary	83
Rationale of DOE/Commerce representatives	84
Rationale of MMS/SOL representatives.....	86
Revisions to Current MMS Royalty Valuation Regulations	87

APPENDIX I MMS Oil Royalty Valuation Regulations

Overview	1
Significant Quantities	6
Arm's-Length Contracts	8
Obtaining A Marketing Arm's Records	10

APPENDIX II Director's Decision on Buy/Sell Exchanges

APPENDIX III Team's 12/95 Option Paper

APPENDIX IV Companies' Use of ANS Crude Oil to Value California Crudes

(Appendix 4 is a separate document and must not be released to anyone not involved in this study. It is separate because it quotes information the companies have designated as sensitive. The Departments have agreed not to disclose sensitive information.)

Overview of Findings and Recommendations

Findings:

In June 1994, the Department of Interior (DOI) commissioned an inter-agency team to address possible underpayment of royalties on Federal crude oil production in California. The team concludes that companies often receive gross proceeds higher than oil company posted prices for crude oil produced in California. Since the team was informed by Minerals Management Service (MMS) and California auditors that most Federal royalty payments were based on postings, it follows that royalties have been underpaid. The team's conclusion is based on MMS audits, two consultant studies, and the team's review of oil sales contracts.

During the period under review, the bulk of California crude oil production was not sold. Rather, it was moved through intra-company transfers, straight exchanges, and buy/sell contracts.

Within the context of MMS' regulations:

- Based on its review of contracts, the team concludes that straight exchanges are not arm's-length sales.
- Similarly, the team concludes that buy/sell transfers should not be considered arm's-length sales unless the oil company can establish that there are opposing economic interests in each buy/sell contract and that they really are outright sales.

For the period 1978 to 1993, the estimated potential collections, including interest, range from \$0 to \$856 million, depending on whether underpayments are pursued, the approach to oil valuation, the inclusion of Royalty-in-Kind sales, and the impact of prior settlements between MMS and oil companies.

Recommendations:

MMS should concentrate its collection efforts on those companies (about 10) that produce at least 90% of Federal crude oil in California.

For periods beginning March 1, 1988, the team recommends computing royalties owed to the Federal government based on premiums paid on arm's-length contracts for oil produced from the same field or area.

The team recommends minimizing the additional audit work required to collect underpayments by:

- The Assistant Secretary issuing a royalty "payor letter" ordering the targeted companies to submit all arm's-length contract records for periods in question, and;
- MMS reviewing the oil contract documents available through the California Long Beach II litigation.

Because MMS audited Texaco for 1989 and 1993, it should immediately send Texaco a bill for 1989 and 1993. If MMS chooses

to go back at least to 1984, the recommended approach for Shell, which it audited for 1984, is similar to that for Texaco.

For the period before March 1, 1988:

- o The Commerce and Energy Department representatives recommend using adjusted Alaska North Slope oil market prices as the basis for valuing Federal crude oil in California for royalty purposes. They recommend pursuing royalty underpayments from 1980 forward.
- o The MMS/Solicitor's Office representatives recommend applying the same procedures as used for the post-March 1, 1988 period for pursuing royalty underpayments. They also recommend that MMS management, in consultation with the Solicitor's Office and the Justice Department, make the decision about how far back to pursue royalty underpayments.

The team recommends that MMS' oil royalty valuation regulations be revised to consider alternatives to reliance on posted prices and to modify a number of definitions and instructions that may hamper royalty collection.

I. EXECUTIVE SUMMARY

Events Leading to Team Formation

The issue of whether major California oil companies underpaid royalties on crude oil by basing those royalties on unreasonably low posted prices¹ goes back many years. The State of California (State) and the City of Long Beach (City), in very lengthy litigation against seven major integrated oil companies operating in California, obtained an extensive body of company documents covering the 1970's and 1980's. Long Beach documents show that major oil companies often bought and sold crude oil at premiums over posted prices.

In 1986, the Minerals Management Service (MMS) reviewed the California oil undervaluation matter with State officials and concluded that posted prices fairly represented royalty value. However, by 1991, ARCO, Shell, Chevron, Mobil, Texaco and Unocal settled for approximately \$345 million (of which \$320 million was in cash) to end the actions alleging undervaluation on State and City leases. Dollar amounts cannot be tied to specific findings,

¹Traditionally, oil posted prices represented prices oil purchasers were willing to pay for particular crude oils in specific areas. Since they often provided the basis for arm's-length purchases and sales, they generally were considered to be representative of market value. But in recent years, posted prices have been increasingly criticized in a number of States as not being representative of the true market value of crude oil.

and issues other than valuation were involved.

In late 1993, in light of these settlements, MMS roughly estimated the size of any potential Federal royalty underpayments and decided the amounts warranted further analysis. The MMS Director consulted with State officials; they agreed that MMS should seek input from other agencies and the State would assist in gaining access to the company documents under court seal.

Interagency Team Formation and Composition

In June 1994, the Department of the Interior (Department) formed an interagency team (team). It included one member each from the Department of Energy, the Department of Commerce, the Department of Justice's Antitrust Division, and the Department's Solicitor's Office, and two MMS employees. Various individuals have represented the State at many of the team's meetings.

Review of MMS Royalty Valuation Regulations

The team reviewed MMS' royalty valuation regulations because a determination of the adequacy of Federal California royalty payments must be made under these regulations. MMS revised its royalty valuation regulations on March 1, 1988. Prior to 1988, MMS' royalty valuation regulations were almost identical to Federal lease terms. Neither these regulations nor the lease terms provide separate directives for valuation under arm's-length and non-arm's-length contracts. Both these regulations and the lease terms set gross proceeds as minimum royalty value. When MMS revised its regulations in 1988, it added specific guidance for valuing oil not sold under arm's-length contracts.

MMS set benchmarks that direct MMS to rely on arm's-length contracts for sales and purchases of oil produced from the same field or area as the oil being valued. This is particularly relevant in California, because most oil produced by integrated oil companies is not sold at arm's-length. The revised regulations maintained the principle that gross proceeds are minimum value for oil sold under both non-arm's-length and arm's-length contracts.

Review of Oil Company Records Under Court Seal

The Departments of Commerce, Energy and Interior (Departments) and eight major oil companies drafted a confidentiality agreement enabling the team to review the records under court seal. These documents showed that the major California oil companies often sold, purchased and valued (for non-royalty purposes) crude oil at premiums over posted prices.

Team Recommends Test Audits

After its first examination of selected court-sealed documents, the team recommended that MMS examine records for one or more oil companies. MMS was to determine if premia over posted prices were paid for Federal oil, and if such premia existed, to determine if Federal royalties reflected these premia. These audits were to review the lessee's gross proceeds based on the first arm's-length sale by the producing company or its affiliate. MMS audited Texaco's records for 1989 and 1993 and Shell's for 1984. The audits confirmed the presence of premia over postings in both Texaco and Shell transactions.

Consultant Contracts

While the audit was underway, MMS retained two consultants with experience in the California oil market. The consultants concluded that the largest underpricing occurred from 1980 to the 1986 oil price crash. One consultant concluded:

- In 1984, posted prices for California crude oils were underpriced between \$2.00 and \$3.00 per barrel, and
- In 1989, posted prices were underpriced from \$0.50 to \$1.00 per barrel.

The second consultant employed California spot market prices for Alaska North Slope (ANS) oil for establishing the value of indigenous California crude oil. The finding was that after adjusting for quality and location differences, open-market prices for ANS crude oil exceeded postings for California crude oil by about \$3 to \$6 per barrel from 1980 to the 1986 oil price crash, and \$1 to \$1.40 from 1986 to 1993.

Options for Underpayment Valuation

At the MMS Director's request, the team developed a list of options for collecting additional royalties that may be due. The team addressed the ten companies with the most Federal California oil production for the period 1978 to 1993. The estimates of potential collections of royalty and interest ranged from no collections to \$856 million, depending on the option selected. The \$856 million and all other estimates included some oil taken

in-kind by MMS and subsequently sold. Therefore, the estimates exceed the amounts that might be collectible from the ten producers. (The team did not investigate recovering underpayments from Royalty-in-Kind purchasers.) Furthermore, these estimates did not consider the fact that settlements between MMS and some of the companies may have foreclosed further collections.

Team's Overall Findings

A large proportion of California oil production is either exchanged between the major integrated firms or moves internally between their affiliates. For the relatively small volume of oil that was sold or purchased outright, payment of premiums above posted prices occurred frequently. Further, auditors informed the team that lessees usually paid royalties on posted prices. To the extent that this is true, lessees' royalty payments on arm's-length sales reflected less than their gross proceeds. Also, oil not sold under an arm's-length contract was often undervalued for Federal royalty purposes because, at a minimum, it did not reflect the price received for oil produced from the same field or area and sold under arm's-length contracts.

Few of the various types of contracts used in the California oil market appear to be arm's-length. Clearly, outright sales of oil are at arm's-length. However, the bulk of California production is disposed of under intra-company transfers, straight exchanges

and buy/sell contracts.²

Based on its review of MMS' regulations and company records, the team does not consider straight exchanges as arm's-length contracts. The team also reviewed several buy/sell contracts, and they do not appear to qualify as arm's-length sales or purchases. That is, as required by MMS' definition of an arm's-length contract, the condition of "opposing economic interest" regarding the contract was not apparent. Rather, they appear to be trades for the mutual benefit of both parties, not unlike straight exchanges where a price is not specified.

Also, straight exchanges are not actual sales, nor do the buy/sell contracts the team reviewed appear to be actual sales. Under MMS' royalty valuation regulations, this provides an additional reason to use the benchmarks to value oil transferred under these transactions.

²Under straight exchanges, two oil companies exchange oil for locational advantages. The exchange contract does not reference a price. A buy/sell contract is a contract where the first party agrees to deliver a fixed volume of production to the second party at a certain location, and the second party agrees to deliver the same volume to the first party at some other location. Prices are fixed in the contract for both transactions; both prices may be the same and separate charges for location differentials may be included, or the prices may differ to reflect transportation or other considerations. However, the prices may not represent reasonable value because any price may be used as long as the difference properly reflects the relative value of the crude oils being traded.

Recommended Approach for Post-3/1/88 Time Periods

Under MMS' regulations, the minimum value for all royalty payments, including those for oil not sold under an arm's-length contract, is gross proceeds. Furthermore, oil not sold under an arm's-length contract should be valued based on the volume-weighted average price for arm's-length purchases and sales of oil from the same field or area. MMS should concentrate its collection efforts on the ten or so oil companies that produce about 90 percent of California's Federal crude oil, as follows:

- MMS should use the first benchmark at 30 CFR § 206.102(c)(1) to calculate, on a company-by-company basis, the volume-weighted average premium over posted prices to value that company's non-arm's-length transactions.
- The premium would be based only on arm's-length sales.
- Federal oil sold at arm's length would be valued based on the lessee's gross proceeds, including any premia.
- For oil not sold at arm's-length, gross proceeds also establishes minimum value.
- MMS would pursue collection on a company-by-company basis.
- If the first benchmark is not applicable, the oil would be valued under the first applicable following

benchmark.

The team recommends minimizing the additional audit work required to collect underpayments by:

- Having the Assistant Secretary issue a royalty "payor letter" ordering the targeted companies to submit all arm's-length contract records for the company and all its affiliates for periods in question, and:
- Reviewing the documents available through the California Long Beach litigation. The purpose of this review is to identify those contracts and other documents that should be made available by companies at the outset of any additional audit work.

To initiate collection, in general, the team recommends:

- Once sufficient information has been obtained and any necessary additional audit work performed for the selected period, MMS should send the company an issue letter describing any problems found. This would serve to crystallize the issues and dollar amounts involved, give each company an opportunity to respond, and set the stage for either a final MMS demand or negotiations.
- MMS should be prepared to issue a bill for unpaid royalties soon after receipt of the company's response

to the above issue letter. Depending on the individual circumstances, MMS' demand letter may include a restructured accounting order.

- MMS should allow the reasonable, actual transportation costs associated with specific crude oil transportation.
- Because MMS audited Texaco for 1989 and 1993, the recommended procedure varies from the general recommendation. MMS should immediately send Texaco an issue letter including proposed bill amounts for 1989 and 1993. In addition, the Department should send the "payor letter" to Texaco covering all relevant years other than 1989 and 1993. Once Texaco is given reasonable time to respond, MMS should then issue a billing for 1989 and 1993. If the other information received from Texaco is insufficient or untimely, MMS should issue a restructured accounting order for the rest of the selected period.
- If MMS chooses to go back at least to 1984, the recommended approach for Shell is similar to that for Texaco.

Recommended Approach for the Pre-3/1/88 Period

Team members differ on the recommendation for assessing and collecting royalty underpayments for the period prior to March 1, 1988. The differences relate to opinions about the latitude

allowed under the pre-1988 regulations to establish royalty value for Federal crude oil.

- The Energy and Commerce Department representatives take the position that the pre-1988 regulations allow MMS to establish value, at least for royalty payors that are also refiners, in accordance with the refining industry's own methods of establishing relative value. That is, the true value of California crude oil to most of the larger royalty payors (who are refiners) should be established in a direct, quality-and-transportation-adjusted comparison to Alaskan North Slope (ANS) crude oil. This is significant because during the period under review ANS crude oil accounted for 30% to 45% of the crude oil refined in California. These representatives concluded that the team's review of refiner/producers' internal valuation procedures, their trading practices, their use and control of proprietary transportation systems, and the history of their market activities provide ample "reasons to the contrary" for looking past the limited arms-length contracts available for review in the pre-1988 period.
- The Department representatives believe that the pre-1988 regulations are, in principle, the same as the post-1988 regulations. Their recommended approach is the same as applied to the post-1988 period. The primary reasons are that both regulations rely on prices paid or offered in the same field or area as the

lessee's production, and they state that royalty is not to be less than the gross proceeds accruing to the lessee from the sale of its production. The Department representatives believe that their recommended approach is consistent with long-established practices and interpretation of the valuation regulations.

Recommended Time Periods for Pursuing Royalty Collections

The team could not reach consensus on the issue of how far back MMS should attempt to collect additional royalties and interest:

- o The Energy and Commerce representatives recommend initiating collection from 1980 forward. Of the potentially recoverable royalties and interest attributable to undervaluation during 1978-1993, 63 to 74 percent is associated with the 1980 to 1985 period. Therefore, to insure that the Federal Government obtains a reasonable part of the amount it should have been paid, collection attempts should reach back to 1980.

Due to different court decisions on the matter, the applicability of the statute of limitations is, at best, unresolved. In addition, the Department argued in court that the statute of limitations does not apply to royalty underpayments. Therefore, any policy decision based solely on statute of limitations considerations limiting collections to a small part of what might be recoverable is not consistent with the

Department's position, and may not be required by the courts.

- o The Department representatives are not making a specific recommendation on how far back collections should be attempted. Instead, they believe this decision should be made by MMS' management in consultation with the Solicitor's Office and the Department of Justice. The final decision should not be based just on potential royalties due each year, but should also consider year-by-year collection risks and other impacts on MMS' programs.

Revisions to Current MMS Oil Royalty Valuation Regulations

The team recommends that MMS' royalty valuation regulations be revised to consider alternatives to reliance on posted prices. Other specific recommendations are in the main report and include:

- o Revise definition of marketing affiliate
- o Define the term "significant quantities"
- o Address the arm's-length/non-arm's-length nature of exchanges